APEX PRO

OPERATOR'S MANUAL
12V Li-Ion Cordless Drill
Model # 49112

⚠ IMPORTANT:

Your new tool has been engineered and manufactured to APEX's™ high standards for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance.

Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your tool properly and only for what it is intended, you will enjoy years of safe, reliable service.

Product questions or need technical support? Please feel free to contact us!

WenProducts.com

800- 232-1195 M–F 8-5:00 CST

techsupport@wenproducts.com

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SPECIFICATIONS

12 V Cordless Drill	Item: 49112
Motor:	12Volt DC
Switch:	VSR (Variable Speed Reversible)
Speed (no load):	0-400RPM
Number of clutch positions:	17+1
Chuck capacity:	3/8" keyless
Max torque:	248 in.lbs
Battery capacity:	1.3 Ah lithium ion
Charge time:	3-5 hours
Charger input:	120Volt, 60Hz AC only
Weight:	2.3 lbs

WARNING: Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE.

SAFETY INSTRUCTIONS

GENRAL SAFETY RULES

WARNING! Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and / or serious injury.

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WORK AREA SAFETY

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

1. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
2. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
3. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
5. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

PERSONAL SAFETY

1. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
3. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and / or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising in power tools that have the switch on invites accidents.
4. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
6. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
7. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust-related hazards.

POWER TOOL USE AND CARE

1. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
2. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
4. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
5. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
6. **Use the power tool, accessories and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

BATTERY TOOL USE AND CARE

1. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
2. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
3. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
4. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

SERVICE

Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

SPECIFIC SAFETY RULES FOR CORDLESS DRILL

1. **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a live wire will make exposed metal parts of the tool live and shock the operator.
2. Use protective gloves when removing the bit from the tool, or first allow the clamp to cool down. The bit may be hot after prolonged use.
3. Use protective gloves when operating the tool. Protective gloves can help to keep you from being burnt and hurt.
4. Keep your hands away from the motor-housing vents. Hot gas comes from the vents during operation.
5. Do not operate the tool at full-load for more than 30 seconds, as this can cause the motor to become too hot, which may damage the motor.
6. Release the trigger immediately when the screws are tightened to avoid breaking the screw.

7. For best results, your battery tool should be charged in a location where the temperature is more that 41 °F (5 °C) but less that 104 ° F (40 °C). Do not store outside or in vehicles.

SAFETY RULES FOR CHARGER

WARNING! Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

1. Before using the battery charger, read all instructions and cautionary markings in this manual and on the battery charger, the battery, and the product using the battery to prevent misuse of the products and possible injury or damage.

CAUTION: To reduce the risk of electric shock or damage to the charger and battery, charge only these rechargeable batteries specifically designated on your charger's label. Other types of batteries may burst, causing personal injury or damage.

2. Do not use the charger outdoors or expose it to wet or damp conditions. Water entering the charger will increase the risk of electric shock.
3. Use of an attachment not recommended or sold by the battery-charger manufacturer may result in a risk of fire, electric shock or injury to persons.
4. Do not abuse the cord or charger. Never use the cord to carry the charger. Do not pull the charger cord to disconnect the plug from receptacle. Damage to the cord or charger could occur and create an electric shock hazard. Replace damaged cords immediately.
5. Make sure that the cord is located so that it will not be stepped on, tripped over, come in contact with sharp edges or moving parts, or otherwise subjected to damage or stress. This will reduce the risk of accidental falls, which could cause injury and damage to the cord, which could then result in electric shock.
6. Keep the cord and charger from heat to prevent damage to the housing or internal parts.
7. Do not allow gasoline, oils, petroleum-based products, etc. to come in contact with plastic parts. These materials contain chemicals that can damage, weaken, or destroy plastic.
8. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If an extension cord must be used, make sure that:
    - The cord is properly wired and in good electrical condition;
    - The size is large enough for AC ampere rating of charger as specified below:

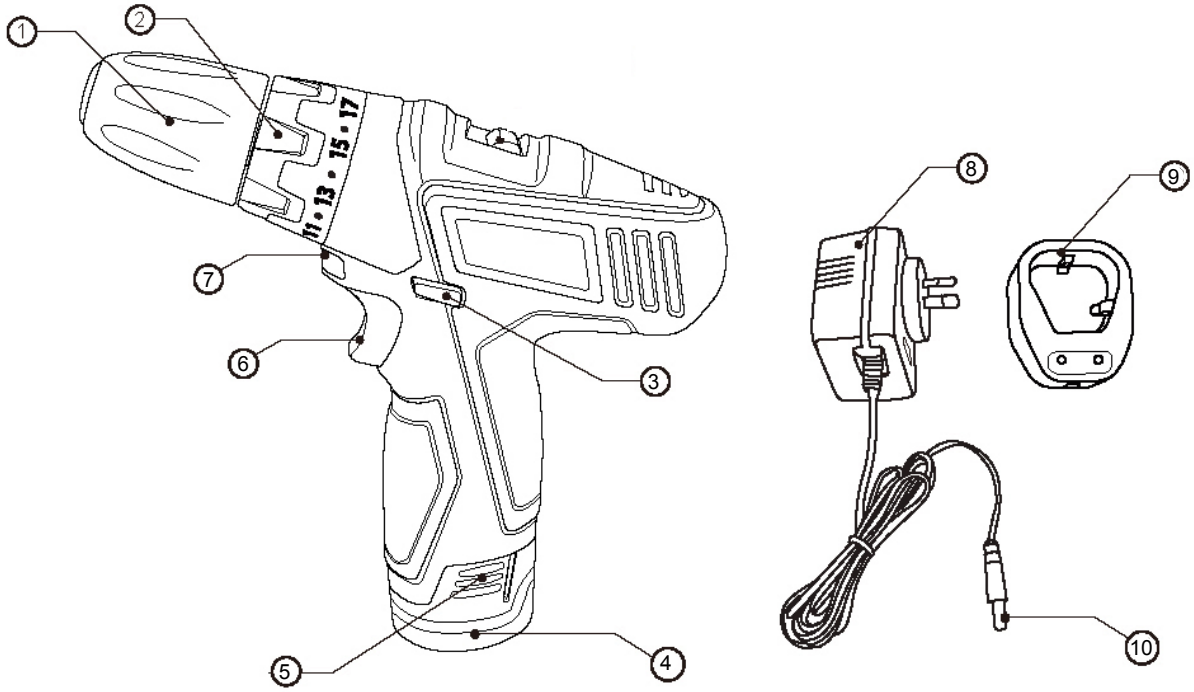
The Cord Length (Feet)	25'	50'	100'
Cord Size (AWG)	16	16	16

NOTE: AWG = American Wire Gauge

9. Do not operate the charger with a damaged cord or plug, which could cause shorting and electric shock. If damaged, have the charger repaired or replaced by an authorized service technician at Service Center.
10. Do not operate the charger if it has received a sharp blow, been dropped, or has otherwise been damaged in any way. Take it to an authorized service technician at Authorized Service Center for an electrical check to determine if the charger is in good working order.
11. Do not disassemble the charger. Take it to an authorized service technician at a Service Center when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
12. Unplug the charger from the electrical outlet before attempting any maintenance or cleaning to reduce the risk of electric shock.

13. Disconnect charger from the power supply when not in use. This will reduce the risk of electric shock or damage to the charger if metal items should fall into the opening. It will also help prevent damage to the charger during a power surge.
14. Risk of electric shock. Do not touch the uninsulated portion of output connector or uninsulated battery terminal.
15. Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you lend this tool to someone else, also lend these instructions to them to prevent misuse of the product and possible injury.

KNOW YOUR DRILL



1-3/8" Keyless chuck
2-Torque adjustment ring
3-Direction of rotation selector
(Forward/Center Lock/Reverse)
4-Battery pack
5-Battery release button
6-Trigger switch
7-LED worklight
8-Charger adapter
9-Charger base
10-Charger jack

ADJUSTABLE TORQUE

The drill has a 17+1position clutch.

TWO-SPEED GEAR BOX

The two-speed gear box is designed for drilling or driving at LOW or HIGH speeds. A slide switch is located on top of your drill for selecting the appropriate speed.

VARIABLE SPEED

The variable-speed trigger switch delivers higher speed with increased pressure and lower speed with decreased trigger pressure.

KEYLESS CHUCK

The keyless chuck allows you to hand-tighten or release the drill bit in the chuck jaws.

FORWARD/REVERSE/CENTER LOCK

The direction-of-rotation selector located above the trigger switch changes the direction of bit rotation. Setting the trigger switch in the OFF (center lock) position helps to reduce the possibility of accidental starting when not in use.

LED WORK LIGHT

Pressing the trigger switch illuminates the LED worklight, located on the front of the Drill Driver. This feature provides extra light for increased visibility.

OPERATION

CHARGING THE BATTERY

WARNING: The charger and battery pack are specifically designed to work together so do not attempt to use any other devices. Never insert or allow metallic objects into your charger or battery pack connections because an electrical failure and hazard will occur.

Your battery pack is UNCHARGED and you must charge once before use. The charger is designed to use standard household 120volt 60Hz power.

1. Plug the charger adapter into a suitable power supply. The red light will illuminate. Insert the battery pack into the charger base. The green light will come on and the red light will remain on.
2. A discharged battery at normal ambient temperature will take approximately 3-5 hours to reach full charge. When charging is complete, the red light will turn off and only the green light will be illuminated.

BATTERY AND CHARGER SAFETY FEATURES

OVER CHARGING PROTECTION

The over charging protection will ensure that the battery is never overcharged. When the battery has reached its fully charge capacity, the charger will automatic shut off, protecting the internal components of the battery from being damaged.

OVER DISCHARGE PROTECTION

An internal component of the battery pack is an over discharge protector. This feature will stop the battery from discharging beyond the recommended lowest safety voltage.

OVER HEAT PROTECTION

The battery has an internal thermister cut off censor which will cease the charging cycle if the battery becomes hot during the charging process. This thermister censor will also stop the battery from operating should the battery become too hot during the operation of the tool. This can happen when the tool is overloaded or being used for extended periods of time.

Up to 30 minutes in cooling time may be required depending on ambient temperature and operation being performed.

OVER CURRENT PROTECTION

Should the battery be overloaded and the maximum current draw be exceeded, the battery will temporarily stop working to protect the internal components. The battery will resume to normal operation once the excessive current draw has returned to normal safe level. This may take a few seconds.

SHORT CIRCUIT PROTECTION

If the battery pack was to short circuit the short circuit protector would immediately stop the battery pack from operating.

This will ensure that no further internal components of the battery or the tool is damaged.

INSTALLING AND REMOVING THE BATTERY PACK FROM THE TOOL

TO INSTALL BATTERY PACK:

Insert battery pack into tool, until an audible click is heard.

TO REMOVE BATTERY PACK:

Depress the battery release button and pull battery pack out of tool.

TRIGGER SWITCH & REVERSING BUTTON

The drill is turned ON and OFF by pulling and releasing the trigger switch (1). The farther the trigger is depressed, the higher the speed of the drill.

A forward/reverse control button (2) determines the direction of the tool and also serves as a lock off button.

To select forward rotation, release the trigger switch and depress the forward/reverse control button to the left.

To select reverse, depress the forward/reverse control button the opposite direction.

NOTE: The center position of the control button locks the tool in the off position. When changing the position of the control button, be sure the trigger is released.

ELECTRIC BRAKE

To stop the Drill Driver, release the trigger switch and allow the tool to come to a complete stop.
The electric brake quickly stops rotating. This feature engages automatically when you release the trigger switch.

TWO-SPEED GEAR BOX SWITCH

The drill has a two-speed gear box switch designed for drilling or driving at LOW or HIGH speeds. A slide switch is located on the top of the drill to select either LOW or HIGH speed.

When using drill in the LOW speed range, the speed will decrease and the drill will have more power and torque. When using drill in the HIGH speed range, the speed will increase and the drill will have less power and torque. Use LOW speed for high power and torque applications and HIGH speed for fast drilling or driving applications.

Use LOW speed for starting holes without a center punch, drilling metals or plastic, drilling ceramics, or in applications requiring a higher torque.

HIGH speed is better for drilling wood and wood composites and for using abrasive and polishing accessories.

NOTE: Avoid running the drill at LOW speed for extended periods of time. Running at LOW speed under constant usage may cause the drill to become overheated. If this occurs, cool the drill by running it without a load at HIGH speed.

CAUTION: Never change gears while the tool is running. Failure to obey this caution could result in serious damage to the drill.

LED WORKLIGHT

The LED worklight, located on the front of the Drill/Driver, will illuminate when the trigger switch is depressed. This provides additional light on the surface of the workpiece for operation in lower-light areas.

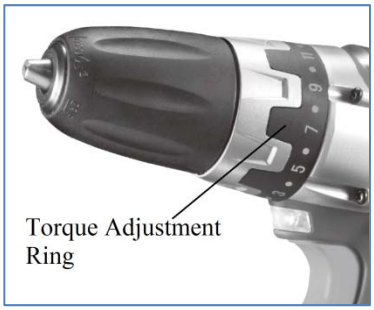
The LED worklight will turn off when the trigger switch is released.

TORQUE ADJUSTMENT RING

This tool is fitted with a torque adjustment ring to select the operating mode and to set the torque for tightening screws. Large screws and hard workpiece materials require a higher torque setting than small screws and soft workpiece materials.

For drilling in wood, metal and plastics, set the collar to the drilling position symbol.

For screwdriving, set the ring to the desired setting. If you do not yet know the appropriate setting, proceed as follows:



1. Set the collar to the lowest torque setting.
2. Tighten the first screw.
3. If the clutch ratchets before the desired result is achieved, increase the ring setting and continue tightening the screw.
4. Repeat until you reach the correct setting. Use this setting for the remaining screws.

DRILLING

1. Use sharp drill bits only.
2. Check the direction of rotation selector for the correct setting (forward or reverse).
3. Support and secure work properly, as instructed in the Safety Instructions.
4. Use appropriate and required safety equipment, as instructed in the Safety Instructions.
5. Secure and maintain work area, as instructed in the Safety Instructions.
6. Run the drill very slowly, using light pressure, until the hole is started enough to keep the drill bit from slipping out of it.
7. Apply pressure in a straight line with the bit. Use enough pressure to keep the bit biting but not so much as to stall the motor or deflect the bit.
8. Hold the drill firmly with two hands to control its twisting action.
9. DO NOT CLICK THE TRIGGER OF A STALLED DRILL OFF AND ON IN AN ATTEMPT TO START IT. DAMAGE TO THE DRILL CAN RESULT.
10. Minimize stalling on breakthrough by reducing pressure and slowly drilling through the last part of the hole.
11. Keep the motor running while pulling the bit out of a drilled hole. This will help reduce jamming.

DRILLING IN WOOD

For maximum performance, use high speed steel or brad point bits for wood drilling.

1. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
2. Increase speed as the drill bit bites into the material.
3. When drilling “through” holes, place a block of wood behind the workpiece to prevent ragged or splintered edges on the back side of the hole.

DRILLING IN METAL

For maximum performance, use high speed steel bits for metal or steel drilling.

1. When drilling metals, use light oil on the drill bit to keep it from overheating. The oil will prolong the life of the bit and increase the drilling action.
2. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
3. Maintain a speed and pressure which allows cutting without overheating the bit. Applying too much pressure will:
   - Overheat the drill
   - Wear the bearings
   - Bend or burn bits
   - Produce off-center or irregular-shaped holes

DRILLING IN MASONRY

For maximum performance, use carbide-tipped masonry bits when drilling holes in brick, tile, concrete, etc.

1. Maintain a speed and pressure which allows cutting without overheating the bit or drill. Applying too much pressure will:
   - Overheat the drill.
   - Wear the bearings.
   - Bend or burn bits.
   - Produce off-center or irregular-shaped holes.
2. Apply light pressure and medium speed for best results in brick.
3. Apply additional pressure for hard materials such as concrete.
4. When drilling holes in tile, practice on a scrap piece to determine the best speed and pressure.
5. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.

WARNING! Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

WARNING! To ensure safety and reliability, all repairs should be performed by a qualified service technician at Authorized Service Center.

MAINTENANCE

Your tool requires no additional lubrication or maintenance. There are no user serviceable parts in your power tool. Never use water or chemical cleaners to clean your power tool. Wipe clean with a dry cloth. Always store your power tool in a dry place. Keep the motor ventilation slots clean. Keep all working controls free of dust.

Occasionally you may see sparks through the ventilation slots. This is normal and will not damage your power tool. Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents. Use clean clothes to remove dirt, dust, oil, grease, etc.

WARNING! To avoid serious personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.

WARNING! When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician at an Authorized Service Center.

LIMITED ONE YEAR WARRANTY

APEX PRO Products is committed to build tools that are dependable for years. Our warranties are consistent with this commitment and our dedication to quality.

LIMITED WARRANTY OF APEX PRO CONSUMER POWER TOOLS PRODUCTS FOR HOME USE
GREAT LAKES TECHNOLOGIES, LLC ("Seller") warrants to the original purchaser only, that all APEX PRO consumer power tools will be free from defects in material or workmanship for a period of one (1) year from date of purchase. Ninety days for all APEX PRO products, if the tool is used for professional use.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Center. To make a claim under this Limited Warranty, please contact us at 1-800-232-1195 or write to us at APEX PRO Products, 501 Davis Road, Elgin, IL 60123. To acquire service, you will have to provide proof of purchase and may be asked to ship the tool back to us freight prepaid.

THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS SUCH AS CIRCULAR SAW BLADES, DRILL BITS, ROUTER BITS, JIGSAW BLADES, SANDING BELTS, GRINDING WHEELS AND OTHER RELATED ITEMS.

ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO ONE (1) YEAR FROM DATE OF PURCHASE. SOME STATES IN THE U.S., SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

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THIS LIMITED WARRANTY APPLIES ONLY TO PORTABLE ELECTRIC TOOLS, BENCH POWER TOOLS, OUTDOOR POWER EQUIPMENT AND PNUMATIC TOOLS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE APEX PRO CUSTOMER SUPPORT.